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An Empirical Investigation into the Impact of Personality on Individual Innovation Behaviour in the Workplace

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Abstract

Today, companies are trying to be competitive through their employees with continuous product and service innovations. Several factors affect the ability of individuals to innovate. Personality is one of them and has important implications for individual innovation behavior in the workplace. This study aims to explore the effect of personality characteristics on individual innovation behavior. Research hypotheses were drawn from the related literatures and tested through the data collected from hotel employees located in Kahramanmaraş in Turkey. Data was analyzed via Smart PLS program. The results reveal that openness to experience but no other personality dimensions is positively related to individual innovation behavior. The findings from this research provide the evidence regarding the link between personality and individual innovation behavior in the workplace.

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1. Introduction

There has been an increasing evidence regarding the role of innovation in the success of the organisations (Martins & Terblanche, 2003; Patterson et al., 2009). Innovation is viewed as the main determinant of organisational success and competitiveness (Calantone et al., 2002; Neely & Hii, 1998; Palangkaraya et al., 2010; Salaman & Storey, 2002; Thornhill, 2006). Recently organisations are paying attention to their human resources to produce innovative behaviors and consequently innovations (Carmeli et al., 2006; Patterson et al., 2009; Scott and Bruce, 1994) because innovations derive from the ideas that come from the individuals in the workplace (Neely & Hii, 1998; Patterson et al., 2009). Firms depend on their employees with creative ideas and effort (Bharadwaj & Menon, 2000; Sousa & Coelho, 2011). Individual innovation behaviour in the workplace is considered to be the main pillars of high-performing organizations (Carmeli et al., 2006). Finding out motivators and enablers of individual innovation behaviour would be a great contribution toward understanding individual innovation (Carmeli et al., 2006; De Jong, 2006; Wu et al., 2011) and organisational innovation and success (Scott & Bruce, 1994; Xerri & Brunetto, 2011). This study looks at the role of personality on individual innovation behaviour. Although several

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previous studies investigated the relationship between personality and innovation, there are some inconsistent results regarding the effect of the certain personality dimensions (e.g. neuroticism) on innovation (Patterson et al., 2009). Therefore, further research is needed in exploring the link between personality and innovation. Particularly studying this relationship within a developing country context would provide important insights into understanding the implication of personality on individual innovation behaviour.

Personality plays an important role in understanding the human behaviour. The Five Factor Model (FFM) of personality has become an important mechanism to understand the structure of personality (Patterson et al., 2009). Five personality dimensions (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) explain most of the meaningful variance in personality. Personality traits have been shown to be related to the workplace behaviors, attitudes, and performance (Bakker et al., 2002; Judge et al., 2002; Kumar & Bakhshi, 2010; Matzler et al., 2011). As an important factor, personality also affects innovation behaviour of the employees in the workplace and is explored in this study.

The present study focuses on personality-individual innovation relationships, formulates hypotheses and tests them based on the data collected through surveying hotels employees located in Kahramanmaraş city of Turkey. The study is expected to provide further empirical evidences to personality and innovation literature and insights regarding how to foster individual innovation behavior in organisations.

2. Theoretical Background

2.1. Personality

Personality plays an important role in understanding the human behaviour. Since this study investigates the individual innovation behaviour, personality is an important factor that needs to be taken into account.

Hodgetts & Luthans (1991, p.56) defined personality as “the individual’s characteristics and behaviour, organized in a way that reflects the unique adjustment the person makes to his or her environment”. According to Magnavita (2002:16), personality is “an individual’s habitual way of thinking, feeling, perceiving, and reacting to the world”.

Matzler et al., (2011, p.299) claim that “five personality dimensions (Neuroticism, Extraversion, Openness to Experience (also labeled Intellect), Agreeableness, and Conscientiousness) explain most of the meaningful variance in personality; this five dimension structure emerge across paradigms (including the lexical and Questionnaire approaches) and across raters, across the lifespan, and across cultures”. These five relatively independent construct altogether provide a meaningful classification to investigate individual differences in terms of work attitudes (Kumar & Bakhshi 2010). Kumar & Bakhshi (2010, p.25) asserted that “five factor model of personality is one of the most prominent models in contemporary psychology to describe the most salient aspect of personality”.

Personality traits have been shown to be related to the workplace behaviors, attitudes, and performance (Matzler et al., 2011). Personality was linked to commitment (Erdheim et al., 2006; Kumar & Bakhshi, 2010), burnout (Bakker et al., 2002), knowledge sharing (Matzler et al., 2011), performance motivations (goal-setting, expectancy, and self-efficacy motivation) (Judge et al., 2002), academic performance (Chamorro-Premuzic & Furnham, 2003). It has been most associated with performance (Barrick & Mount, 1991; Kumar & Bakhshi 2010). Chamorro-Premuzic & Furnham (2003) found that both intelligence and personality comprise salient individual differences affecting performance.

2.2. Individual Innovation Behavior

Neely & Hii (1998, p. 8) simply defined innovation as “the exploitation of new ideas”. Innovation is also defined “as the development and implementation of new ideas by people who over time engage in transactions with others within an institutional order” (Van De Ven, 1986, p. 590). Palangkaraya et al., (2010, p.3) defined innovation as “the introduction of new forms of production (processes and products) into the workplace”. According to Amabile (1996, p.1) innovation is “the successful implementation of creative ideas within an organisation”. Almost everybody from academic and practitioner side tends to agree the importance of innovation for the competitiveness of organisations

as well as social and economical development of societies (Kim, 1997; Salaman & Storey, 2002; Scholl, 2005; Terziovski, 2007). Despite the risk and uncertainty, successful innovations can have a sizeable impact on firms' financial results and economic performance (Unsworth & Parker, 2003; Marques & Ferreira, 2009).

Individual's ability to innovate in the workplace is one of the most important ways to produce innovation in the organisations (De Jong & Hartog, 2007; Palangkaraya et al., 2010; Xerri & Brunetto, 2011). The willingness and ability of individuals to innovate ensure the flow of innovation the organisations. Many researchers in the literature regard innovative work behaviour crucial for the performance and survival of the organisations (Carmeli, Meitar & Weisberg, 2006; De Jong & Hartog, 2007; Janssen, 2000; Scott & Bruce, 1994; Unsworth & Parker, 2003; Xerri & Brunetto, 2011). Organisations are coping with the changes in the business environment through emphasizing human resources and capitalising their innovation ideas and behaviour (Unsworth & Parker, 2003).

Due to its rich and elusive nature, many definitions of individual innovation behaviour can be found in the literature (Xiaojun & Peng, 2010). Janssen (2000, p.288) defined innovative work behaviour, "as the intentional creation, introduction and application of new ideas within a work role, group or organization, in order to benefit role performance, the group, or the organization" based on West & Farr (1989) and West (1989). Innovative behaviour is defined in the health sector as "the introduction and implementation of new ideas, processes, products, or procedures designed to significantly benefit the patient" (Hannemann-Weber et al., 2011). Scott & Bruce (1994) views individual innovation as a multistage process with different activities and different individual behaviours necessary at each stage. They outlined three stages relevant to individual innovations, namely idea generation, coalition building and implementation. Wu et al., (2011) argued that in contrast to innovation at the team or organization level, individual innovation behaviour is based on an individual's engagement in generating and applying new ideas and approaches in the workplace. De Jong & Hartog (2008, p. 5) argued that "innovative work behaviour typically includes exploration of opportunities and the generation of new ideas (creativity related behaviour), but could also include behaviours directed towards implementing change, applying new knowledge or improving processes to enhance personal and/or business performance (implementation oriented behaviour)". They distinguished four related dimensions of individual work behaviour: opportunity exploration, idea generation, championing and application.

Researchers have studied the individual innovation behaviours in terms of antecedent, construct itself and outcomes (De Jong & Hartog, 2008). Studies looking at the antecedent of individual innovation behaviour looked at the various factors affecting individual innovation behaviours (e.g. De Jong & Hartog, 2008; Hu et al., 2009; Xiaojun and Peng, 2010). In reviewing the literature, Parzefall et al., (2008) looked at the main organizational, team, job and individual level factors that influence employee innovativeness. Leader-Member-Exchange (LMX), satisfaction with HR practices (employee influence, flow, rewards and work content) (Sanders et al., 2010), leadership, individual problem-solving style, and work group relations (Bruce & Scott, 1994), knowledge sharing (Hu et al., 2009), creative self-efficacy (Hsu et al., 2011) need for cognition (Wu et al., 2011), self-leadership (Carmeli et al., 2006), participative leadership and external work contacts (De Jong & Hartog, 2008), individual and organisational learning (Xiaojun & Peng, 2010), and job autonomy and learning goal orientation (Sazandrishvili, 2009) positively affect individual innovation behaviour. Some researchers have interested in explaining and validating the individual innovation behaviour (e.g., De Jong & Hartog, 2008; Bruce & Scott, 1994; Wu et al., 2011). Some studies looked at the implications of individual innovation behaviours. For instance, individual innovation behaviours were positively related to innovation output (suggestions and implemented innovations) in a study conducted by De Jong & Hartog (2008).

Individuals in the workplace are keys to the innovation in organisations. Neely & Hii (1998) argued that the bedrock of innovation is ideas that come from the individuals in the workplace. Organisations depend on their employees for creative and innovative ideas, product and services (Ahmed, 1998; Patterson et al., 2009; Sousa & Coelho, 2011). How the personality of the employees in the workplace affect their innovation behaviour constitutes the main objective of this study.

3. Hypotheses Development

3.1. Personality and Individual Innovation Behavior

Previous studies showed strong effect of personality on workplace behaviors, attitudes, and performance (Matzler et al., 2011). Patterson et al., (2009) argued that personality plays an important role in understanding and explaining innovation behaviour of the individuals. Patterson, et al., (2009) contended that innovation research has explored the various traits and personal characteristics that facilitate individual or group innovation. Previous studies mainly focused on the relationship between innovation and, (i) cognitive ability, (ii) personality, (iii) motivation, (iv) knowledge, (v) behavioural abilities and (vi) emotion, mood states (Patterson, et al., 2009).

This study suggests that five personality dimensions are related to individual innovation behaviour in the workplace. The reasoning behind this relationship is that individual's characteristics and behaviours constitute the main core of innovation in organisations (Patterson et al., 2009). Some of the personality characteristics associated with innovation reported in the literature are imaginative, inquisitive, high energy, high desire for autonomy, social rule independence and high self-confidence (Patterson et al., 2009). Ahmed (1998, p.35) also presented some of the personality traits associated with innovation from previous studies in the literature (high valuation of aesthetic qualities in experience, broad interests, attraction to complexity, high energy, independence of judgement, intuition, self-confidence, ability to accommodate opposites, persistence, curiosity, and energy) that can facilitate innovation in the workplace.

The following sections explain the five personality dimensions and their link with individual innovation behaviour.

3.1.1. Neuroticism and Individual Innovation Behavior

Anxious, irritable, temperamental, and moody are the characteristics associated with neurotic people (Goldberg, 1990). Chamorro-Premuzic & Furnham (2003) found that neuroticism may impair academic performance. Patterson et al., (2009) argued that there seems to be inconsistent results regarding the implications of neuroticism on innovations due to context dependency of the neuroticism. Positive and negative relationships between neuroticism and innovation have been found in the literature (Patterson et al., 2009). Emotional stability was reported to be the predictor of work performance (Barrick et al., 2001). Based on these arguments, the following hypothesis is developed;

H1: Neuroticism is negatively related to individual innovation behaviour.

3.1.2. Extraversion and Individual Innovation Behaviour

A tendency to be self-confident, dominant, active and excitement seeking are the characteristics of extraversion. Extraverts reflect positive emotions, higher frequency and intensity of personal interactions, and a higher need for stimulation (Bakker et al., 2002). Patterson et al., (2009) argued that although individuals are the source of innovations, innovations rarely occur in isolation. In order to innovate, employees often need to relate and interact with other individuals - inside or outside the organisation-hence the importance of communication, articulation, and social networking skills. They further looked at the previous empirical studies and noted that there are inconsistent results regarding whether extraversion or introversion affect innovation. They concluded that introversion is related to real life artistic endeavour, while extraversion is good predictor of creativity and innovation (Patterson, 2002; Batey & Furnham, 2006). Based on this information, the next hypothesis is forwarded;

H2: Extraversion characteristics positively affect individual innovation behaviour.

3.1.3. Openness to Experience and Individual Innovation Behaviour

The intelligence and curiosity are the traits associated with openness to experience (Bakker et al., 2002). Referring to Watson & Hubbard (1996), Bakker et al., (2002) noted that people with high on openness to experience reflect a more flexible, imaginative, and intellectually curious approach in situations characterized with stress. Blickle (1996) found that openness to experience is related academic performance. Based on the previous studies, Patterson, Kerrin & Gatto-Roissard (2009) asserted that openness to experience is the most salient personality dimension to predict the propensity for innovation (e.g., Batey & Furnham, 2006) and noted that there is a great deal of empirical studies with evidence of positive relationship between openness to experience and innovation Patterson et al., (2009) further noted that some studies reflected that this relationship might be moderated by the contextual factors (e.g., Burke & Witt, 2002).

H3: Openness to experience is positively related to individual innovation behaviour.

3.1.4. Agreeableness and Individual Innovation Behaviour

People who score high on agreeableness are good-natured, forgiving, courteous, helpful, altruistic, generous, and cooperative (Barrick & Mount 1991). Agreeableness involves getting along with others in pleasant and satisfying relationships (Matzler et al., 2011). Agreeableness is found to be related to workplace performance (Matzler et al., 2011). Patterson et al., (2009) pointed out the importance of interaction, communication, articulation, and social networking of employees for the successful innovations. Matzler et al., (2011) discussed that agreeableness relates to emotional warmth. Such emotion may increase an employee's social identity with his or her work environment, thereby increasing his or her need to reciprocate the organization for providing a supportive social environment. Patterson et al., (2009) mentioned several studies that have demonstrated a negative association between agreeableness and innovation (George & Zhou, 2001; Gelade, 1997; Patterson, 1999). Based on the ideas presented here, the following hypothesis is developed;

H4: Agreeableness is negatively associated with individual innovation behaviour.

3.1.5. Conscientiousness and Individual Innovation Behaviour

People with high conscientiousness are dependable, responsible, organized, hardworking, and achievement oriented (Barrick & Mount 1991). Chamorro-Premuzic & Furnham (2003) found that conscientiousness is associated with higher academic achievement. Matzler et al. (2011) argued that people with high conscientiousness engage into the effort to document their knowledge in order to share it with others and to contribute to organizational success. They found that conscientiousness is positively related to documentation of knowledge. Kumar & Bakhshi (2010) asserted that conscientiousness reflects strong sense of purpose, self-discipline, dutyfulness, obligation and persistence, leading to hard work (Kumar & Bakhshi, 2010). Patterson et al., (2009) argued that traits associated with conscientiousness are not related to innovation; instead lack of conscientiousness is associated with innovation (e.g., Barron & Harrington, 1981; Harrison, et al., 2006). Rothmann & Coetzer (2003) found that conscientiousness is positively related to creativity. Barrick et al., (2001) found that conscientiousness is a valid predictor across all performance outcomes. Based on these argument, it is suggested that;

H5: Conscientiousness has negative link with individual innovation behaviour.

4. Methodology

The sample of the study consisted of 215 employees in ten small and medium sized hotels located in Kahramanmaraş in Turkey. The managers of the hotels helped to distribute questionnaire through random sampling.

Sixtytwo usable questionnaires were returned, but 5 questionnaires containing missing data were taken out and this reduced the useable sample size to 57 with a 25% response rate.

4.1. Measures and Data Analysis

The questionnaire items were derived mainly from previous studies and modified to fit to the nature of this study. Five personality items were taken from the study of John et al., (2008). Six individual innovation behaviour items used in this study was developed by Hu et al., (2009), based on work of Grey & Garrett (2004) and Scott & Bruce (1994). A Likert type scale with five response options ranging from strongly disagree to strongly agree was used for measuring all the items. Because most of the employees do not know English, questionnaire items were translated into Turkish. All the analyses were performed based on the data collected through a survey by using PLS-Graph (build 1126), a Partial Least Squares (PLS) Structural Equation Modelling (SEM) tool (Ringle, Wende & Will, 2005).

5. Results

Demographic characteristics of the respondents are shown in Table 1. The sample was mostly male (71.93%) with remaining 28.07 percent female. Married respondent made up the 54.4% of the respondents, while single ones constituted 45.61% of the respondents. Regarding education level, 66.67% described their education as high school and below; 28.07% vocational high school; and 5.26% bachelor degree. The number of respondents from each department ranged from 1.75 percent to 24.56 percent. In terms of job tenure, 50.88% has 2 or fewer years; 28.07% has 3-9 years; and 21.05% has 10 and more years of tenure. Age distribution of the respondents ranges from 25 years and below (33.33%) to 45 and more (1.75%). The respondents tend to be 45 years old and below, reflecting a relatively young sample. Employees participated in the study come from small and medium sized hotels located in Kahramanmaraş city of Turkey.

Table 1. Demographic Characteristics of Respondents

Variables	Frequency	Percentage (%)	Variables	Frequency	Percentage (%)
Hotel department			Gender		
Food and beverage	14	24.56	Male	41	71.93
Rooms/Housekeeping	10	17.54	Female	16	28.07
Finance/Accounting	2	3.51	Total	57	100
Selling/Reservation	12	21.05	Education		
General Affairs	1	1.75	High school or below	38	66.67
Security	4	7.02	Voc. High School	16	28.07
Guest Relations	5	8.77	Bachelor degree	3	5.26
Others	9	15.79	Total	57	100
Total	57	100	Age		
Job Tenure (years)			Below 25	19	33.33
2 or less	29	50.88	25-34	24	42.11
3-9	16	28.07	35-44	13	22.81
10-more	12	21.05	45 and more	1	1.75
Total	57	100	Total	57	100
			Marital Status		
			Married	31	54.39
			Single	26	45.61
			Total	57	100

The research model along with hypotheses H1 through H5 is shown in Figure 1. The model was analyzed using Smart PLS 2.0. Smart PLS simultaneously assesses the psychometric properties of the measurement model and

estimates the parameters of the structural model. Reliability results of testing measurement model are shown in Table 2. The results indicate that the measures are robust in terms of their internal consistency reliabilities as indexed by their composite reliabilities. The composite reliabilities of different measures in the model range from 0.74 to 0.94 (with one exception, 0.65), which exceeds the recommended threshold value of 0.70 (Nunnally, 1978). The average variance extracted (AVE) for each measure is above 0.50, consistent with recommendation of Fornell & Larcker (1981). Table 2 also shows the test results regarding discriminant validity of the measure scales. The bolded elements in the matrix diagonals, representing the square roots of the AVEs, are greater in all cases than the off-diagonal elements in their corresponding row and column. This result provides support for discriminant validity of the scales.

Table 2: Reliability Assessment of the Measurement Model

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Ekstra	Agree	Cons	Neuro	Open	Innovation
Ekstra	0.5389	0.7409	0.0000	0.6776	0.7340					
Agree	0.5726	0.7990	0.0000	0.7130	0.5746	0.7567				
Cons	0.5307	0.7695	0.0000	0.6537	0.6272	0.5836	0.7284			
Neuro	0.5091	0.6536	0.0000	0.5244	-0.4351	-0.5018	0.4266	0.7135		
Open	0.5434	0.7833	0.0000	0.6806	0.6366	0.6130	0.6013	0.5311	0.7371	
Innovation	0.7540	0.9484	0.4805	0.9347	0.4362	0.5991	0.4953	0.4711	0.6559	0.8683

Note: Ekstra: Extraversion, Agree: Agreeableness, Cons: Conscientiousness, Neuro: Neuroticism, Open: Openness to Experience, Innovation: Individual Innovation Behaviour

Table 3: Factor Loadings and Cross Loadings

	Ekstra.	Agree.	Cons.	Neuro.	Open.	Innovation
Extraversion related item 1	0.5871					
Extraversion related item 2	0.7675					
Extraversion related item 3	0.7612					
Extraversion related item 4	0.6280					
Extraversion related item 5	0.6753					
Extraversion related item 6	0.8234					
Extraversion related item 7	0.5908					
Agreeableness related item 1		0.6091				
Agreeableness related item 2		0.5475				
Agreeableness related item 3		0.7007				
Agreeableness related item 4		0.4478				
Agreeableness related item 5		0.5353				
Agreeableness related item 6		0.6697				
Agreeableness related item 7		0.7686				
Conscientiousness related item 1			0.6271			
Conscientiousness related item 2			0.8470			
Conscientiousness related item 3			0.6939			
Neuroticism related item 1				0.6363		
Neuroticism related item 2				0.7380		
Neuroticism related item 3				0.5910		
Neuroticism related item 4				0.6345		
Neuroticism related item 5				0.5868		
Openness to Experience related item 1					0.5219	
Openness to Experience related item 2					0.6786	
Openness to Experience related item 3					0.6132	
Openness to Experience related item 4					0.6959	
Openness to Experience related item 5					0.6993	
Openness to Experience related item 6					0.7362	
Individual innovation behaviour related item 1						0.8606
Individual innovation behaviour related item 2						0.8786

Individual innovation behaviour related item 3	0.9017
Individual innovation behaviour related item 4	0.8141
Individual innovation behaviour related item 5	0.9015
Individual innovation behaviour related item 6	0.8502

Note: Ekstra: Extraversion, Agree: Agreeableness, Cons: Conscientiousness, Neuro: Neuroticism, Open: Openness to Experience, Innovation: Individual Innovation Behaviour

Convergent validity is tested with Smart PLS by extracting the factor loadings and cross loadings of all indicator items to their respective latent construct. The results are shown in Table 3. According to the respective table, all the items loaded (the bolded factor loadings) on their respective construct from lower bound of 0.52 to an upper bound of 0.90 and more highly on their respective construct than on any other construct (the non-bolded factor loadings in any one row). All items load more highly on their respective construct than the other construct showing convergent validity. All items loaded above the threshold level of 0.50 (Havarila, 2010). Furthermore, each item's factor loading on its respective construct was highly significant ($P < 0.01$). The loadings presented in Table 3 confirm the convergent validity of measures for the latent constructs. Please note that some of the items were deleted from the model due to their insignificant factor loading or reflect high loading on the more than one factor.

Figure 1 shows the results of the structural model, where the beta values of path coefficients indicate the direct influences of predictor upon the predicted latent constructs. According to the results, openness to experience positively influences individual innovation behaviour, thus supporting the related hypothesis (H3). Result also indicates that extraversion, agreeableness, conscientiousness, and neuroticism are not related to individual innovation behaviour, leading to reject H1, H2, H4, and H5.

The results support the notion that openness to experience is an important personality trait that has implications for individual innovation behaviour in organisations. The other personality traits did not reflect any effect on individual innovation behaviour in this study.

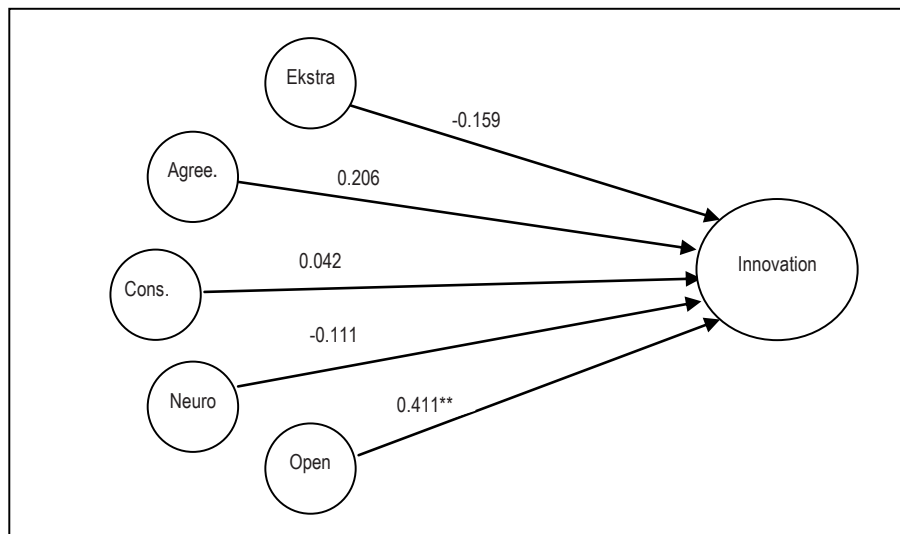


Figure 1: The Structural Model with Path Coefficients

Note: Path coefficient: ** Significant at $p < 0.01$

6. Discussion and Conclusion

The impact of five-factor personality dimensions on individual innovation behaviour in the workplace was explored in this study. The hypotheses were drawn from the related literatures and tested based on the data collected from the hotel employees in Kahramanmaraş city of Turkey.

The results show that openness to experience has a positive effect on individual innovation behaviour, thus confirming H3. This result directly supports the theoretical arguments underlying the relationship between openness to experience and individual innovation behaviour (e.g., Bakker et al., 2002; Patterson et al, 2009) and support the other empirical studies (e.g., Batey and Furnham, 2006) that also reported significant effect of openness to experience on individual innovation behaviour. This result strengthens the value of openness to experience for innovative individuals. Silvia et al., (2009), argued that openness to experience is fundamental to creativity because it predicts creativity in a wide range of domains and level of analysis. Active imagination, aesthetic sensitivity, attentiveness to inner feelings and a preference for variety are all regarded the main traits associated with openness to experience and affect performance (Rothmann & Coetzer, 2003) and creativity (Rothmann & Coetzer, 2003; Wolfradt & Pretz, 2001) and the individual innovation behaviour at work as confirmed in this study. Companies need to involve the employees with traits associated with openness to experience such as curiosity, intelligence, and flexibility. These individuals are likely to engage in innovation related initiatives and behaviours.

The results also show that other personality dimensions have no effect on individual innovation behaviour. This result leads us to reject H1, H2, H4 and H5. Although the theoretical arguments and empirical findings claim that extraversion, agreeableness, conscientiousness, and neuroticism are all related to individual innovation behaviour (Patterson et al., 2009), our findings did not provide any support for the hypothesized relationship between these variables. A study conducted by Rothmann & Coetzer (2003) reported no relationship was between personality dimensions and task performance and creativity. However, the results were different with the canonical analysis. The results revealed that a combination of emotional stability (i.e. low Neuroticism), extraversion, openness to experience and conscientiousness was associated with task performance and creativity. In another study conducted on college students (Wolfradt & Pretz, 2001), high score on extraversion and low score on conscientiousness were related to creativity. Reviewing the meta-analytical studies regarding personality-performance link, Barrick et al (2001) reported that extraversion, openness to experience and agreeableness were not predicted overall work performance (except for some specific occupations and specific criteria). Silvia et al., (2009) argued that the other four dimensions of personality except openness to experience predict creativity less consistently, either positive or negative. This argument somewhat support our findings in a way that this study did not find any effect of these four dimensions of personality on innovation behaviour. The results and arguments presented above point that further studies along with rigorous analyses are needed in exploring the link between personality and performance and innovation.

The results of this study suggest that the hotels need to consider the personality dimensions of their employees as far as innovation behaviour and related issues are concerned. They need to pay attention to personality traits and issues during employee selection and career development. Organisations need to employ individuals with relevant personality characteristics so that they can increase their innovative potential and capability. Individuals in the workplace are the organization's greatest assets (Nehmeh, 2009) that need to be channelled for the success of the organisations (e.g. innovation performance). Our study support the notion pointed out by De Jong & Hartog (2007) regarding the importance of employees' ability to be innovative in determining organisational innovation capability. Organisations should encourage employees to be more innovative through appropriate systems, policies and procedures such as career opportunities and reward systems.

The limitations of this study that need to be taken into account when evaluating the results require some attention. One limitation is that firms participated in this study come from one city with relatively small sample size that creates barriers to generalise the findings of this study. It is thus advised to conduct further studies with relatively big sample including other cities and probably other sectors. Future studies may also include other individual related variables (e.g., values) and explore the effects of these factors on individual innovation behaviour. Future studies may include other individual innovation behaviour measurement and other analysis techniques. Lastly, researchers

took some measures to tackle common-method biases inherent in this type of research. Following Podsakoff et al., (2003), researchers ensured the respondents with information in the front page of the questionnaire regarding the confidentiality of their individual responses. In order to reduce respondents' concern about being evaluated; the participants were assured that there was no right or wrong answers to questions in the questionnaire.

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